



## TINTING OF CONCRETE FOR ADA RAMPS MSP-96-17

**1.0 Description of MSP-96-17.** This specification covers red tinting of concrete surface where specified in the plans for ADA curb ramps.

**1.1** Unless otherwise stated, specification section references are from the version, in effect at the time of this contract, of the Missouri Standard Specifications for Highway Construction and its supplements.

### **2.0 Materials.**

**2.1** Tinting material shall be red and shall meet Sec 1056 for surface tinting, or be a dry shake-on surface hardener approved by the engineer and designed for outside sidewalk use.

### **3.0 Construction.**

**3.1** When Sec 1056 tinting is used, the concrete shall be tinted by applying the tinting material uniformly over, and working it into the surface of the fresh concrete to a depth of 1/8 to 1/4 inch in a manner and quantity required to obtain a uniform color density meeting the approval of the engineer, after which the final finishing operations shall proceed. The tinting mixture shall consist of tinting material mixed dry with cement at a 2:1 ratio by weight. This mixture shall be applied at the rate of approximately 45 pounds per 100 square feet of surface. The actual quantity required to obtain the desired color density may vary from this estimated quantity.

**3.2** When a dry shake hardener is used, it shall be applied in two applications. The first application shall be approximately 2/3 the manufacturer's total required amount, followed by the remaining 1/3, both applications troweled in as required to obtain a final minimum tint penetration approximately 1/4" in depth. Dry shake hardener shall be otherwise applied in accordance with the manufacturer's recommendations.

**3.3** No additional water shall be added during the tinting process. The final concrete surface coloration shall be medium to dark red as approved by the engineer.

**3.4** Tinted concrete shall be cured in accordance with the curing requirements for the contract item for which tinting is specified. If the contractor elects to use membrane curing for those items where its usage is permitted, it shall be of the clear or transparent type. For dry shake-on surface hardeners, any curing compounds used shall be compatible with the hardener.

**4.0 Payment.** No direct payment will be made for tinting of concrete surface as required in the plans. All costs shall be included in those for the concrete placement as covered elsewhere. If the authorized area of tinted concrete differs from that specified in the plans, compensation to the contractor for the affected concrete will be adjusted on the basis of \$2.50 per square yard of affected surface, by either adding or subtracting the price adjustment as required for the differing amount.